



A.D. 1870, 31st May.

N° 1583.

SPECIFICATION

OF

LAWRENCE GARDNER

AND

THOMAS BUSHBY.

PILL-MAKING MACHINES.

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:

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25, SOUTHAMPTON BUILDINGS, HOLBORN.



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A.D. 1870, 31<sup>st</sup> May. N° 1583.  
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Pill-making Machines.

(This Invention received Provisional Protection only.)

PROVISIONAL SPECIFICATION left by Lawrence Gardner and Thomas Bushby at the Office of the Commissioners of Patents, with their Petition, on the 31st May 1870.

We, LAWRENCE GARDNER, of the City of Manchester, Machinist,
5 and THOMAS BUSHBY, of the same Place, Chemist, do hereby declare the nature of the said Invention for “IMPROVEMENTS IN PILL-MAKING MACHINES,” to be as follows:—

These improvements relate to that class of pill-making machine in which a grooved roller is used working in close contact with a grooved
10 segmental stationary plate, and consist in mounting the grooved roller at the extremity of a spindle and not between bearings as hitherto practised. The segmental cylindrical plate in this case is affixed upon a sleeve working concentric with the grooved roller and by means of an eccentric or cam has a reciprocating circular motion imparted to it.
15 The ordinary knife for cutting the mass into strips is dispensed with in this arrangement, and the front edge of the segmental cylindrical plate forms the knife by being sharpened or brought to a cutting edge for the purpose. The grooved roller is flattened at that part of its circumference where the cutting off is performed, and is there indented

Gardner & Bushby's Improvements in Pill-making Machines.

or serrated transversely across so as to ensure the strip cut off from the mass being taken forward under the segmental cylindrical plate, which is also indented or serrated near its mouth or knife edge to ensure a revolving motion being imparted to the strip. The reciprocating motion of the segmental cylindrical plate is found advantageous in 5 forming the pills more perfectly and in preventing them sticking in the grooves.

A machine constructed according to this Invention may be made with a change of rollers and segmental cylindrical plates in order to manufacture different sizes of pills, and the rollers for rolling the mass 10 previous to passing it through the machine may be arranged on the top of the same framework.

LONDON :

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1870.